

Notice of Allowability

Application No.

10/087,891

Examiner

John S. Chu

Applicant(s)

KITSON ET AL

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/22/04.
2. ☒ The allowed claim(s) is/are 2-15, 17-29 and 33-42.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

John S. Chu
Primary Examiner
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REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The claimed independent claims of the invention are drawn to the following:

3. (Amended) An imageable element comprising, in order:

a substrate having a hydrophilic surface,

an underlayer comprising a first polymeric material over the hydrophilic surface, and

a top layer comprising a second polymeric material over the underlayer,

in which:

the second polymeric material is crosslinked;

the top layer is ink receptive and insoluble in an alkaline developer;

the top layer and the underlayer are each removable by the alkaline developer following thermal exposure of the element;

the element comprises a photothermal conversion material, and

~~The element of claim 1 in which the second polymeric material comprises a crosslinked self-crosslinking material.~~

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17. (Amended) A method for forming an imageable element, the imageable element comprising, in order:

a substrate having a hydrophilic surface,

an underlayer comprising a first polymeric material over the hydrophilic surface, and

a top layer comprising a second polymeric material over the underlayer,

in which:

the second polymeric material is crosslinked;

the top layer is ink receptive and insoluble in an alkaline developer;

the top layer and the underlayer are each removable by the alkaline developer following thermal exposure of the element; and

the element comprises a photothermal conversion material;

the method comprising the steps of:

(a) forming the underlayer over the hydrophilic surface of the substrate;

(b) applying a coating solution comprising a coating solvent and a crosslinkable material over the underlayer; and

(c) crosslinking the crosslinkable material to form the second polymeric material;

The method of claim 16 in which the crosslinkable material is crosslinked by heating.

33. (Amended) A method for forming an image, the method comprising the steps of:

thermally imaging an imageable element and forming an exposed imageable element comprising exposed and unexposed regions; and

developing the exposed imageable element with an alkaline developer and removing the exposed regions;

in which the imageable element comprises, in order:

a substrate having a hydrophilic surface,

an underlayer comprising a first polymeric material over the hydrophilic surface, and

a top layer comprising a second polymeric material over the underlayer,

in which:

the second polymeric material is crosslinked;

the top layer is ink receptive and insoluble in an alkaline developer;

the top layer and the underlayer are each removable by the alkaline developer following thermal exposure of the element;

the element comprises a photothermal conversion material;

the imaging step is carried out with infrared radiation;

the second polymeric material comprises a crosslinked self-crosslinking material, and

~~The method of claim 32 in which~~ the crosslinked self-crosslinking material is a crosslinked self-crosslinking acrylic emulsion or a crosslinked self-crosslinking urethane/acrylic emulsion.

The claimed invention recites in the imageable element a crosslinked self-crosslinking material. A method for forming an imageable element in which the crosslinkable material is crosslinked by heating and a method for forming an image wherein the crosslinked self-crosslinking material is as specified in claim 33.

The closest prior art reference of record is to VAN DAMME et al '005 which recites an imaging element comprising a first photosensitive layer which falls within the scope of the claimed underlayer, a second thermosensitive layer which is disclosed to be crosslinked, however the claims as amended now recite an imageable element wherein the second polymeric material comprises a crosslinked self-crosslinking material which is not taught or suggested in the VAN DAMME '005 reference. Further none of the prior art references of record disclose a

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crosslinked top layer in an imageable element that is IR sensitive wherein the crosslinked material is specified as currently recited.

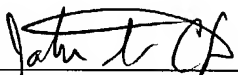
Because of the reasons as state above, claims 2-15, 17-29, 33-42 are now seen as allowable and passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

The fax phone number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1700.



John S. Chu
Primary Examiner, Group 1700

J.Chu
April 30, 2004